

SUMMARY

Title of the PhD thesis: RESEARCHES ON THE AGRICULTURAL EXTENSION ACTIVITIES IN IRAQ AND THEIR IMPROVEMENT PROCEDURES BASED ON THE EXPERIENCE OF AGRICULTURAL EXTENSION IN ROMANIA, elaborated by PhD. student eng. SALIH ABDULMUTTALEB ABBAS SALIH, Scientific Coordinator, PhD, Prof. Univ. DR GHICI MANEA, 2018, USAMV Bucharest.

KEY WORDS : extension agent, extension services, agricultural extension, agricultural consultancy, extension programs, consultancy programs, extension methods, individual extension, group extension, mass extension, extension activities, evaluation, specialized technical assistance, agriculture association, production capitalization, significance threshold, Chi^2 test , extension development ways, association trend, Iraq, governorates , Dhi Qar Province , Romania, Europe, questionnaire, respondents.

Extension activities are an important resource for modern agriculture, in light of the short-term and long-term benefits for farmers, being two-dimensional viewed by both those who apply it and those who is applied on: as a lifestyle but also as a business.

This paper aims to analyze the agricultural extension at global, European level and in several Arab countries with a comprehensive study in Iraq, Dhi Qar Province, but also in Romania, seeking among the best performing examples worldwide ways to improve this activity in the two studied countries.

The study comprised 4 randomly selected villages, with a sample of 60 respondents, farm leaders, all men.

Chapter I, "THE EXTENSION IN AGRICULTURE EVOLUTION ANALYSIS", approaches the concept of extension, its content and its role in the food production system. By way of approach, the extension activity is considered on the one hand a method of providing concrete advice and assistance, and on the other hand is viewed as a specialized professional service made by specialized trained and skilled persons in a certain field.

The agricultural extension fulfills four functions that have especially a methodological character and concerns: the transfer of information, study and popularize the farms performance, creating organizational structures, mobilizing farmers by discussions and by concrete help.

It is analyzed the organization of the agricultural extension activity worldwide (especially exemplified in the US), in several Arab countries (Jordan, Saudi Arabia, Pakistan, Tunisia) and European countries (Germany, France, Hungary, Poland, Bulgaria, Czech Republic), in which were highlighted the main organizational structures, the evolution of the extension activity, the results. Thus, there are differences in the organization of the agricultural extension activity, the transformations of the activity over time, but also the way of the capacity provision of extension.

Chapter II, "INDICATORS AND METHODS OF ASSESSING THE AGRICULTURAL EXTENSION ACTIVITY", deals based on the data from the literature the indicators of the extension activity, the methods used in the agricultural extension activities and the costs related to this activity.

The analysis indicators and appreciation of the management of agricultural extension services can be structured in three categories and can be presented in the following form: indicators for assessing the development of agricultural extension services at territorial level and over time; indicators used to assess efficiency of individual extension method, group extension, mass extension and with help of auxiliary methods; indicators for assessing the efficiency of farm extension services at farm management level. Extension methods applied in agricultural activity are represented by communication techniques, which may have a mutual (discussions) or unilateral character (the expository extension). The methodological forms used in the extension activity are focused on the analysis / understanding directions that enable the formulation of a diagnosis, thus outlining the prospects for improvement.

The data used for the analysis are from the statistical evidence from Iraq, Romania, the ministries of both countries, international statistics database as World Bank, Eurostat and FAOSTAT, which were analyzed by various comparative methods and in the dynamic of the analyzed time period. The personal data analyzed in the paper were collected with the help of the individual questionnaire, at the level of the villages that benefited of consultancy, completed by the 60 respondents, for the activity of the extension agents and the analysis of the questionnaires was done using the χ^2 test method.

Chapter III, "THE ROLE AND PLACE OF EXTENSION IN AGRICULTURE IN THE REPUBLIC OF IRAQ", is structured in three parts.

In the first part of the chapter it is analyzed the geographical area of the Republic of Iraq, the economic and social system, the rural population and its occupational level, the structure of the rural population, the potential of agricultural production and its level of development, the

current level in educational training for agriculture, all compared to several neighboring Arab countries.

The analysis highlights the fact that the population of Iraq has grown a lot in the last decades, while also increasing the occupational level. There is however a downward trend in rural population, urbanization level comprising a part of Iraqi youth people. The current level in educational training for agriculture is on the rise, with significant increases over the period studied but much lower compared to the other studied Arab countries, having as impediment in development the reduced possibilities of physical access, poor learning conditions, poverty, but also the reduced expenditures for education and research allocated by the state.

The agriculture of the Republic of Iraq is dominated by the cereals crops and dates plantations, and is also a sheep and goat, chicken and milk producing country. Agriculture is developed on a smaller area because irrigation is needed, the climate is not very friendly, insufficient precipitations and the soils have a medium potential fertility, most of the activities being concentrated in the plains of Mesopotamia, irrigated by the Tigris and Euphrates rivers. The main form of land exploitation is the family type agricultural farm.

Through consistent efforts, farmers have been able to increase their production considerably, although the results in the vegetable sector are inferior to the neighboring Arab countries. Increases are also reported in the livestock sector, where livestock doubled their number in certain categories.

The second part of the third chapter analyzes the organization of the extension in agriculture in Iraq, the extension being a very important factor in the development of this sector. There is a good organization of this activity managed by the Iraqi Ministry of Agriculture, the command structure called General Authority for Expansion and Cooperation in Agriculture (AGS). The Extension agents are organized at both local and regional level, a large part of them having higher education and implicitly specialized studies to carry out the extension activities.

The third part of the chapter is based on the questionnaire, making an assessment of the extension activity on agricultural holdings. The 60 respondents are of different age categories, all farm heads, all over 40 years, primary or high school education and exploiting areas ranging from 10 to 50 ha.

From the analysis of the answers given in the questionnaire it can be stated that there is a large part of the respondents who have a high degree of satisfaction with the agricultural activity being carried out, being important the aspect that they have big families and an heir who will continue their agricultural activity.

The evaluation of the consultancy received was made through a series of questions, the main issues that emerged were the following: there is an impediment in the reception of information especially among beneficiaries who have only primary education, many of them expressing a lower degree of appreciation of the extension by field of activity; the most appreciated methods are individual or group extension; there is a poor understanding of the technical, economic and computer knowledge they have been offered; among the most valuable consultancy development activities are those with the help of specialists and written information; there is an increased interest in the priority activities carried out through consultancy, especially those aiming the reconstruction of the area; respondents are very pleased with the idea of extension received in cooperation with foreign organizations; the most important aspects for the farmers surveyed are the capitalization of production and the elaboration of projects in order to be able to benefit of farm endowment or with the help of extension agents to apply for loans that are advantageous for improving with agricultural equipment the farm activities, extension activities that they are willing to pay.

Chapter IV, "THE ANALYSIS OF THE PLACE AND ROLE OF EXTENSION IN AGRICULTURE IN ROMANIA". The chapter starts with the description of Romania's natural and geographical area, being a very different area to that of Iraq, Romania is a country with excellent agricultural potential, benefiting from a milder climate, rainfall, fertile soil but with a poor agricultural infrastructure. Production is increasing in most cereals crops, but the livestock sector is affected by the changes that Romania has experienced since 1990, the livestock being considerably decreasing.

The chapter continues with the description of the extension activity in Romania, which shows the role of the Ministry of Agriculture and Rural Development, which nevertheless does not control this activity in the last years, but contributes in different ways to its improvement.

Private companies have a great importance in this activity, but a high importance have especially agricultural education and agricultural research in Romania, through publications such as journals, books, fairs, forums, experimental groups, mass media, etc.

Among the most important institutions are the University of Agronomic Sciences and Veterinary Medicine, along with the research centers they have, the Research Institute under the aegis of the Academy of Agricultural and Forestry Sciences. UASVM has organized and organizes training courses for farmers, for professional training, for agricultural consultancy, endorsed and recognized by the Ministry of Education.

Chapter V, "WAYS FOR IMPROVING EXTENSION ACTIVITIES IN THE REPUBLIC OF IRAQ AND ROMANIA ON THE BASIS OF JOINT EXPERIENCE AND WORLDWIDE EXPERIENCE", includes a systematic analysis of the main characteristics of the extension in Iraq and Romania, the legislation of both countries highlighting the strengths and weaknesses and the characteristics of the more developed agricultural extension activities, taken as an example for the two countries.

At the end of the chapter, proposals are made to improve the organization of extension and consultancy activities, among which the most important are internal legislation, department cooperation, task setting, establishment of the material base, formation of qualified extension staff, increasing the visibility of this service.

The paper ends with a series of conclusions aimed at providing an overview of all analyzes performed and more elaborate proposals in order to develop this activity so important for the agriculture of both countries.

Own contributions that arise from the study:

- The study conducted in Iraq, 4 villages, 60 respondents;
- The evaluation of the data obtained with the χ^2 association test, which allowed the statistical analysis of the analyzed problems;
- Pragmatic proposals, statistically tested, on the development of the extension activity according to the farmer's age, the size of the farm and the degree of training.

I consider that the doctoral thesis contributes to raising awareness among the decision makers to increase the quality of the extension activity through the development of agricultural extension programs, the qualification of the extension agents, the development of the material base and, above all, the allocation of an extension activity focused on the interest and understanding of the beneficiaries.